

URGWOM News

A newsletter devoted to informing the public of the status of the Upper Rio Grande Water Operations Model (URGWOM)

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URGWOM to Undergo Cooperating Agency Testing

December 2002 is the target for the beginning of testing of the Water Operations Model by users outside the Technical Team agencies. Testing will be conducted by representatives of the URGWOM Cooperating Agencies, the six federal agencies signatory to the original Memorandum of Understanding (MOU) in 1996 and the five additional entities that signed the MOU in 1997.

Using their own resources, initial outside testing will be available to the Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey, Bureau of Indian Affairs, International Boundary and Water Commission (U.S. Section), U.S. Army Corps of Engineers, Albuquerque, Santa Fe, Rio Grande Restoration, and Sandia and Los Alamos National Laboratories.

Others will have an additional opportunity for testing using their own resources, after completion and review of the results from the initial testing most likely in September 2003.

The URGWOM Steering Committee also recommended that there be independent testing by those without direct involvement in basin operations and issues. This would be the last phase of URGWOM testing.

Model testing will involve running test scenarios using the latest versions of RiverWare and URGWOM. All testers will be required to return model with saved output files, to be checked by the URGWOM Technical Team. Specific requirements for the testers are identified in the addendum to the Quality Control Plan that has recently been developed.

August 22 Technical Review Committee Meeting – Updated Physical Model

The Technical Review Committee will meet on August 22, 2002, at the Corps of Engineers in Albuquerque from 8:30 a.m. to noon. The meeting is open to the public. This is your opportunity to hear about the progress in URGWOM development and to help the Technical Team by submitting your comments. Some of the topics to be discussed include:

- Availability of model data on URGWOM web site
- Update physical model verification and calibration (to Elephant Butte)
- Physical (reservoir) accounting modeling
- Planning model development
- Outside testing of URGWOM

The URGWOM documentation is available for review by downloading the files from the URGWOM web page at <http://www.spa.usace.army.mil/urgwom/docintro.htm>. The titles with stars (★) on the next page are the updated documents that will be discussed at the meeting. Hard copies of the documentation can be obtained by contacting Gail Stockton at (505) 342-3348.

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Quality Control Plan Updated

The URGWOM Data and Quality Assurance/Quality Control (QA/QC) subcommittee drafted an addition to the URGWOM Quality Control Plan to address data handling and model testing. The proposed Database and Model Testing QA/QC Plan addresses URGWOM procedures and deadlines from the development phase through testing to the production phase. All of these steps will be overseen by the URGWOM Technical Team.

The QA/QC Plan identifies recommended computer system and personnel training requirements that would be needed before testing can be performed. Recommended system requirements include PC or UNIX hardware and the appropriate software license from CADSWES. Recommended RiverWare training includes simulation modeling training and rule-based simulation modeling training or equivalent experience.

Documents Are Available on the Web Site

There is a great deal of information available for downloading and viewing at the URGWOM web site. The information includes model input and supporting data that has been used in the calibration and verification of the URGWOM physical and accounting models, metadata and data that can be selected by reach, and the current versions of documents that explain the assumptions, methods, and data used to simulate the Rio Grande hydrology, water accounting, and river and reservoir operations.

The documents currently available are listed below.

- ✦ **Physical Model Documentation: Third Technical Review Committee Draft**—describes river routing techniques, the development of travel times used in the variable time lag method, the methods and assumptions used to develop various loss coefficients and a discussion of the validation of reaches above Cochiti Dam.
- ✦ **Middle Rio Grande Valley Model Calibration and Validation**—describes the procedures used to calibrate and validate the physical model in the middle Rio Grande valley between Cochiti Dam and Elephant Butte Reservoir.
- **Physical Model Appendix**—Plots of data used to develop travel times and loss rates for the middle valley.
- **URGWOM Workspace**—workspace view of RiverWare objects used by URGWOM to simulate the Rio Grande from the New Mexico-Colorado border to El Paso.
- **URGWOM Physical Accounting Model Documentation**—describes the model that is used to account for all the flows and storages at Rio Chama and mainstem reservoirs and for apportioning losses between San Juan-Chama Project water and native Rio Grande water.
- **Physical Accounting—Abiquiu Reservoir Accounting Example**—step-by-step example computation of daily accounting of reservoir losses at Abiquiu Reservoir.
- **Accounting Model Validation**—describes the procedures used to validate the accounting of water in six reservoirs used in the URGWOM model: Heron, El Vado, Abiquiu, Cochiti Lake, Jemez Canyon and Elephant Butte.
- **URGWOM Runoff Forecast Model Documentation**—describes the model that is designed to develop snowmelt runoff hydrographs for portions of the basin.
- **Model Review**—Memoranda summarizing and responding to comments on the January 26, 2000 and February 27, 2001 Technical Review Documents. The metadata and data files on the web site include information on agriculture, diversions, crop evapotranspiration, local inflows, reservoirs, river leakage, streams, and wastewater.



Contact Us to Exchange Information

It is our intent to provide effective information exchange on the progress and development of URGWOM to the people in the upper basin. If you have ideas on how to do a better job of sharing information, please contact one of the co-team leaders listed on the first page.